

**Federal Railroad Administration, DOT**

**§ 232.107**

brakes, position of the isolation switch, and position of the automatic brake valve on all unattended locomotives. The procedures and instruction required in this paragraph shall take into account winter weather conditions as they relate to throttle position and reverser handle.

(5) Any hand brakes applied to hold unattended equipment shall not be released until it is known that the air brake system is properly charged.

(o) Air pressure regulating devices shall be adjusted for the following pressures:

| Locomotives  | PSI   |
|--|-------|
| (1) Minimum brake pipe air pressure:   |       |
| Road Service .....   | 90    |
| Switch Service .....   | 60    |
| (2) Minimum differential between brake pipe and main reservoir air pressures, with brake valve in running position ..... | 15    |
| (3) Safety valve for straight air brake .....  | 30-55 |
| (4) Safety valve for LT, ET, No. 8-EL, No. 14 EI, No. 6-DS, No. 6-BL and No. 6-SL equipment .....                        | 30-68 |
| (5) Safety valve for HSC and No. 24-RL equipment .....   | 30-75 |
| (6) Reducing valve for independent or straight air brake .....   | 30-50 |
| (7) Self-lapping portion for electro-pneumatic brake (minimum full application pressure) .....                           | 50    |
| (8) Self-lapping portion for independent air brake (full application pressure) .....                                     | 30-50 |
| (9) Reducing valve for high-speed brake (minimum) .....  | 50    |

[66 FR 4193, Jan. 17, 2001, as amended at 67 FR 17581, Apr. 10, 2002; 73 FR 61553, Oct. 16, 2008; 74 FR 25174, May 27, 2009]

**§ 232.105 General requirements for locomotives.**

(a) The air brake equipment on a locomotive shall be in safe and suitable condition for service.

(b) All locomotives ordered on or after August 1, 2002, or placed in service for the first time on or after April 1, 2004, shall be equipped with a hand or parking brake that is:

- (1) Capable of application or activation by hand;
- (2) Capable of release by hand; and
- (3) Capable of holding the unit on a three (3) percent grade.

(c) On locomotives so equipped, the hand or parking brake as well as its parts and connections shall be inspected, and necessary repairs made, as often as service requires but no less frequently than every 368 days. The date of the last inspection shall be either entered on Form FRA F 6180-49A or suitably stenciled or tagged on the locomotive.

(d) The amount of leakage from the equalizing reservoir on locomotives and related piping shall be zero, unless the system is capable of maintaining the set pressure at any service application with the brakes control valve in the freight position. If such leakage is detected en route, the train may be moved only to the nearest forward location

where the equalizing-reservoir leakage can be corrected. On locomotives equipped with electronic brakes, if the system logs or displays a fault related to equalizing reservoir leakage, the train may be moved only to the nearest forward location where the necessary repairs can be made.

(e) Use of the feed or regulating valve to control braking is prohibited.

(f) The passenger position on the locomotive brake control stand shall be used only if the trailing equipment is designed for graduated brake release or if equalizing reservoir leakage occurs en route and its use is necessary to safely control the movement of the train until it reaches the next forward location where the reservoir leakage can be corrected.

(g) When taking charge of a locomotive or locomotive consist, an engineer must know that the brakes are in operative condition.

**§ 232.107 Air source requirements and cold weather operations.**

(a) *Monitoring plans for yard air sources.* (1) A railroad shall adopt and comply with a written plan to monitor all yard air sources, other than locomotives, to determine that they operate as intended and do not introduce